

LBL Electrical Safety Self-Assessment

April 8, 2005

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A. Executive Summary

The Environment Health and Safety Division (EH&S), in conjunction with the Electrical Safety Subcommittee of the Laboratory Safety Review Committee, conducted an assessment of the LBNL (also referred to as Laboratory) electrical safety program. This assessment began on March 15 and was completed on March 28, 2005. The primary purpose of the assessment was to establish a baseline of performance to support continuous improvement of the Laboratory's electrical safety program.

The assessment concludes that LBNL has a strong safety culture and technical expertise in electrical safety. Personnel who are involved with or support electrical work at the Laboratory, including electricians, electronics technicians, safety personnel, subcontractors, and key supervisors, superintendents, and managers are knowledgeable of their work, demonstrate a strong commitment to work safely, and are openly supportive of the changes in the LBNL electrical safety program. The strong safety culture and expertise of these individuals form the basis for safe electrical performance at the Lab.

The assessment also concludes that programmatic weakness exists in the Laboratory's electrical safety program, when compared to NFPA 70E, "Standard for Electrical Safety in the Workplace," 2004 Edition. If these weaknesses are not addressed, the potential exists for errors and/or accidents due to confusion and the absence of clear guidance on the safe performance of work.

This assessment identifies 21 noteworthy practices, 22 findings (regulatory non-compliances) and 22 observations (recommendations for improvement). Key conclusions of this assessment include:

- **Energized Electrical Work Permit.** A single energized electrical permit that complies with NFPA 70E should be implemented.
- **Subcontractor Electrical Safety.** The flow-down of specific electrical safety requirements in contract language should be improved, safety plans and checklists that describe the subcontractor's electrical safety program should be improved, and better guidance should be provided to project managers and superintendents on orienting/training subcontractors on the Laboratory specific requirements for the safe performance of electrical work.
- **Electrical Safety Program Documents.** Chapter 8 of PUB 3000, "Electrical Safety" should be revised to reflect new requirements, to address all elements of the electrical safety program required by NFPA 70E, and to describe the program in terms of how the work is preformed by LBNL workers.

- **Electrical Safety Training.** The training required for the electrical safety program needs upgrading to reflect new requirements and to ensure employees attend specific training courses required by regulation.
- **Feedback Systems and Continuous Improvement.** The LBNL self-assessment process should be improved to ensure electrical work is regularly and thoroughly evaluated to support its continuous improvement. Electrical safety inspection services should be expanded and improved. LBNL also needs to conduct an annual audit of the Lockout/Tagout program, required by OSHA and NFPA 70E.

This assessment includes this report and three appendices. Appendix 1 is a list of personnel by title interviewed for this assessment. Appendix 2 is the summary of the survey performed by the Electrical Safety Subcommittee against the criteria provided by DOE Office of Science for the Jefferson Lab electrical safety review in February 2005. Appendix 3 is a corrective action plan to address the findings and observations from this assessment.

B. Background and Purpose

The Electrical Safety Subcommittee recognized the need for programmatic improvements in electrical safety and has been involved in updating and revising the electrical safety program for the previous 12-18 months. In October 2004, a subcontract employee was seriously injured in an arc blast electrical accident at the Stanford Linear Accelerator. This accident sharply increased awareness of the risks of electrical work and the need for a strong electrical safety program. The Laboratory revised their Hot Work or Energized Electrical Work Permit in October and again in December to better control energized electrical work. In addition, manipulative energized work has been sharply curtailed (none has been performed since the SLAC accident in October 2004). Work also began on the revision to Chapter 8, "Electrical Safety," and a procurement was initiated to obtain the services of an expert on electrical safety training to provide training for electrical workers and support staff on NFPA 70E.

In January 2005, the DOE Office of Science (SC) indicated they were going to perform electrical safety reviews at the 10 SC Laboratories. The first review was conducted at the Jefferson Laboratory in early February. The LBNL Electrical Safety Subcommittee was provided a copy of the DOE criteria used at Jefferson Laboratory to review their program. The LBNL Electrical Safety Subcommittee used these criteria to conduct a review of the LBNL program. In late February, LBNL decided to conduct a formal assessment of the electrical safety program that would incorporate the review by the Electrical Safety Subcommittee and additional interviews, work observations, and reviews by specialists outside the Laboratory. The assessment was authorized with two major goals:

1. Establish a baseline for our electrical safety program which will serve as a basis for additional improvements, and
2. Ensure our readiness for the DOE Office of Science review.

C. Description of the Appraisal Process

The assessment evaluated the LBNL electrical safety program against the following provisions of NFPA 70E, “Standard for Electrical Safety in the Workplace, 2004 Edition”:

- Article 100, “Definitions”
- Article 110, “General Requirements for Electrical Safety Related Work Practices”
- Article 120, “Establishing an Electrically Safe Work Condition”
- Article 130, “Working On or Near Live Parts”

These articles define the basic elements of an electrical safety program.

Annexes to NFPA 70E, were considered for good practices. Chapter 2, “Safety Related Maintenance Practices,” Chapter 3, “Safety Requirements for Special Equipment,” and Chapter 4, “Installation Safety Requirements,” were not evaluated. OSHA requirements and other references were considered as they are referenced or related to the applicable NFPA 70E requirement.

The self-assessment included presentations on the status of the program, reviews of documents that support the program and how it is implemented, interviews with key staff, observations of electrical work activities by employees and subcontractors, and observations of electrical safety program coordination activities such as the meeting of the Electrical Safety Subcommittee and the presentation of information with regard to this assessment at the Safety Review Committee.

During this assessment more than 30 persons were interviewed and work was observed at the Advanced Light Source, the 88inch Cyclotron, the Accelerator and Fusion Research Division (Building 5 and 16), the Engineering Division office area, and the Joint Genome Institute. A list of the titles of persons interviewed is provided in Appendix 1.

D. Assessment Team

This assessment was conducted by the EH&S Division in conjunction with the Electrical Safety Subcommittee.

The Assessment Team included:

Richard DeBusk, Team Leader
Occupation Safety Manager
EH&S Division

Otis Wong
Office of Assessments and Assurance
EH&S Division

Keith Gershon
Hazard Assessment Lead
Lawrence Livermore National Laboratory

Bob Mueller, Interface to the Electrical Safety Subcommittee
Chair, LBNL Electrical Safety Subcommittee

David Allen, Observer
DOE Oak Ridge Operations Office
Assigned to support the DOE Berkeley Site Office

Edith Perry, Administrative Support
EH&S Division

An executive oversight team was formed to review the assessment team's methods, provide guidance to the assessment team, and review their findings when the assessment was complete. This executive team included:

Phyllis Pei, Director, EH&S Division
Guy Bear, Deputy Director, Facilities Division
Ben Feinberg, Operations Manager, Advanced Light Source
Dennis Collins, Outgoing Chair, LBNL Electrical Safety Subcommittee

D. Assessment Results

The assessment results are provided below in the context of Integrated Safety Management effectiveness. The results are expressed as noteworthy practices, findings (failure to comply with a regulatory requirement), and observations (opportunity for a process improvement).

In addition, Attachment 2 provides the results of the assessment, including the survey results from the Electrical Safety Subcommittee measured against the lines of inquiry used by DOE Office of Science for the Jefferson Lab assessment in February 2005.

Attachment 3 provides a recommended corrective action plan. This plan is provided to assist in the rapid development and implementation of corrective actions.

1. Work Planning

Electrical safety is considered in all aspects of work planning. For LBNL performed work, electrical work is issued to qualified workers in work orders. The routine work order is supplemented by a routine pre-job briefing (as described in NPFA 70E Article 110.7G). For more complex work that involves energized work, an energized electrical work permit is required. The Appendix A1 permit is required for Lockout/Tagout, testing, and troubleshooting. This level of permit exceeds the minimum requirements of NPFA 70E and is a good practice to heighten awareness and ensure disciplined communications. The Appendix B permit is required for manipulative energized electrical work. For researchers, the Activity Hazard Documents define the research activity, the hazards of that activity, and the hazard controls. For subcontractors, electrical safety requirements are defined in the terms and conditions of their contract and in job-specific safety plans they submit to LBNL (or checklists for jobs less than \$50,000).

Noteworthy Practices

- LBNL has not performed manipulative energized electrical work since the SLAC accident last October.
- The inclusion of hazards, controls, and Lockout/Tagout steps in the new (under development) MAXIMO work orders will be an improvement because it will be easier for the worker to use and will integrate safety directly into the work procedure. It was noted that improvements in the MAXIMO work orders are still under development and have not yet been implemented in the field.
- The use of an energized electrical work permit (Appendix A1) for testing, trouble shooting, and the verification of zero energy for Lockout/Tagout is a good proactive policy. The form now being used does not provide all information necessary to comply with NFPA 70E. This is recognized by the Electrical Safety Committee and they are in the process of revising the form to provide this information. The committee also plans to use the form as an aid in conducting pre-job briefings.
- The Electrical Safety Subcommittee has taken the lead and arranged for electrical workers and support staff to receive NFPA 70E training by a nationally known expert in mid-2005. This contract instructor will also train LBNL instructors, so that LBNL employees can continue to provide this training program for new employees and for refresher courses.

Findings:

- 1.1 The flow-down of safety requirements to subcontractors in general provisions and technical specifications (Section 01020 of LBNL Facilities Master Specifications, EH&S General Requirements) does not include specific electrical safety requirements, such as how to use the LBNL Energized Electrical Work Permit, as required in NFPA 70E, Article 110.1(A).
- 1.2 The electrical safety program is described in Chapter 8 of PUB 3000, "Electrical Safety." This chapter does not reflect field work practices and is not in compliance with NFPA 70E requirements as defined Article 110.7, "Electrical Safety Program." This chapter should be revised as soon as possible. Among other issues, the revision of Chapter 8 should address:
 - Guidance to supervisors on how to designate "Qualified Electrical Workers, as defined in NFPA 70E, Article 110.6.
 - Guidance should be provided to support researches who use electrical equipment, but who are not qualified to perform electrical work.
 - Required protocols for subcontract electricians and University of California Berkeley Campus electricians who perform work at LBNL facilities.
 - Guidance should be provided to building managers and/or equipment custodians on oversight of electrical work performed service contractors.
 - Clarification of roles and responsibilities for all parties and organizations involved in maintaining the Laboratory's electrical safety program.

Observations:

- 1.3 The pre-job briefings observed during the assessment were compliant with NFPA 70E, Article 110.7 (G), but could be improved with more formality. No briefing checklist was evident in use and a pre-job briefing for complex, high-risk work could benefit from such a checklist.

2. Hazard Identification

Hazards in electrical work were identified on the revised MAXIMO work order system (not yet in use) and on the energized electrical work permit, which also covers Lockout/Tagout verification, testing, and troubleshooting. For subcontracts, hazards are identified in the statement of work. Subcontractors also use the Appendix A and B Energized Electrical Work Permit. For research work, electrical hazards are identified in Activity Hazards Documents and on the Appendix B permit for manipulative energized electrical work.

Noteworthy Practices:

- The use of Jobsite Analysis of Work Safety (JAWS) forms for craft workers is commendable. The worker is briefed on the anticipated hazards before beginning work. When the worker arrives at the jobsite they perform their own hazard analysis and document this on the JAWS form. If any discrepancy exists, the worker contacts his/her supervisor for resolution. This process supports the worker's close involvement with hazard analysis and control.
- The inclusion of hazards, controls, and Lockout/Tagout steps in the new (under development) MAXIMO work orders improve hazard communication to the worker and integrate safety directly into the work procedure. It was noted that the MAXIMO work orders reviewed by the assessment team for work that was observed did not include these improvements because they are still under development.

Observations:

- 2.1 The JAWS process described above as a noteworthy practice could (and should) be improved by more formal documentation. The process does not exist in procedure.

3. Establishment of Hazard Controls

Hazard controls are established using several tools:

- For LBNL electricians and electronic technicians, hazard controls for routine work are discussed in routine pre-job meetings.
- For LBNL electricians and electronic technicians, hazard controls for high-hazard work are specified in energized electrical work permits.
- For research work, electrical hazards are specified in Activity Hazards Documents.
- For subcontract work, electrical hazards are specified in contract documents, are discussed in pre-job meetings, and are contained in Appendix A2 energized electrical work permits.

- Hazard controls include engineered controls, administrative controls, and personal protective equipment (PPE). Procedures, permits, work orders, and training are important administrative controls.

Noteworthy Practices:

- Interviews and observations at the Advanced Light Source (ALS) indicated that this facility has taken a very proactive approach to electrical safety, especially since the SLAC accident. Multiple layers of approvals are required for research activities to ensure safety is incorporated and ALS management routinely walks the spaces of the research facility to ensure research activities are performed safely and to provide assistance when needed. An electrical safety subcontractor has been included to accelerate improvements.
- Interviews and observations of electrical work performed by KOO Contractors at the Joint Genome Institute indicated that subcontract employees were aware of the electrical hazards for the job, were familiar with the job-specific safety plan (which included a discussion of electrical hazards), and had been briefed by the LBNL managers and the electrical safety engineer on the use of the Appendix A2 energized electrical work permit for subcontractors.
- The LBNL Electrical Safety Engineer took the initiative and communicated the revised energized electrical work permit forms and process directly to workers (and some subcontractors) in face-to-face briefings in December and January. More than 100 workers were briefed. The effectiveness of the briefings was evident in interviews conducted by the assessment team with electrical workers and subcontractors who were able to explain how the revised process worked in their own words and were observed following the revised policy in their work.

Findings:

- 3.1 The Pre-Job Safety Checklist, which is used by subcontractors to define their job-specific safety plan for contracts less than \$50,000 does not include information on electrical safety. Interviews and record reviews showed that more than one version of this form is in use which indicates more control over the administration of these documents is needed.
- 3.2 First Aid training is not required for electricians in the current version of the Job Hazards Questionnaire, in violation of NFPA 70E, Article 110.6 (c), "Training Requirements, Emergency Procedures."
- 3.3 Personnel lists presented to the assessment team as "qualified electrical workers" under the NFPA definition were found to have personnel who had not completed CPR training, which is required of electrical workers in NFPA 70E, Article 110.6 (C).
- 3.4 LBNL electrical safety course EHS 260, "Basic Electrical Hazard Awareness," is provided in classroom and an online challenge format. The online challenge format requires the student to take the test, which if passed completes the instruction. This method of instruction does not constitute "classroom" or "on-the-job training. Only these two types of electrical safety training are allowed by NFPA 70E, Article 110.6 (B).
- 3.5 LBNL electrical safety training (with the exception of CPR training) does not provide refresher or retraining as required in 29CFR1910.147 (C)(7),(iii), 29CFR1910.332(c), and NFPA Article 120.2 (D)(5).

- 3.6 The Appendix B Energized Electrical Permit now in use does not provide information required by NFPA 70E, Article 110.1(A). This condition is recognized by the Electrical Safety Subcommittee and a new form is in development that will comply with NFPA 70E.

Observations:

- 3.7 Four EH&S provided courses were evaluated during this assessment: EHS-256, "Lockout/Tagout," EHS-260, "Basic Electrical Hazard Awareness," EHS-249, "Electrical Safety for Design and Fabrication of Experimental Apparatus," and EHS-250, "Electrical Safety for Qualified Electrical Workers." These courses would benefit from updating the material to reflect current practice, a better discussion of arc blast hazards, and better integration with equipment specific training that supplements these courses.
- 3.8 The Job Hazards Questionnaire (JHQ) program could be improved to help supervisors define and designate qualified workers by requiring specific electrical training, including first aid/CPR.
- 3.9 Activity Hazard Documents (AHDs) are used to authorize high-hazard work for researchers. Currently there are no thresholds for hazardous electrical work that would trigger the need for an AHD. Electrical hazards and controls are identified in AHDs only as secondary hazards. It should be noted that when electrical hazards were addressed in AHDs, field observations from this assessment found the controls to be adequate. EH&S should evaluate whether to establish trigger levels for hazardous electrical work for the AHD process.

4. Work Performance

Employees perform work based on the scope definition and hazard controls that are described earlier.

Noteworthy Practices:

- Electrical workers in general displayed a ready acceptance of improvements and process changes to improve their safety. This degree of "ready acceptance" is evidence of a sound safety culture where continuous improvement is part of the work routine.
- Subcontractors at the Molecular Foundry (Rudolph and Sletten) and the JGI (KOO Contractors) were observed during this assessment to perform their work in a safe and effective manner. Subcontractor employees were able to explain electrical hazards and control in their own words and demonstrated an understanding of LBNL policies and procedures.

Findings:

- 4.1 LBNL employees use a variety of methods to control access to areas where electrical work is being performed. These methods include barriers and electrical workers providing manual signaling. These practices do not meet the requirements of NFPA 70E, Article 130.7(E) "Alerting Techniques." Barricades are required to limit access to areas

containing live parts, including areas where lockout/tagout verification for the absence of electrical energy is being performed

- 4.2 Voltage rated gloves were observed in use at the Advanced Light Source that were oily and did not contain the date for periodic inspection as required in NFPA 70E, Article 130.7 (16). The gloves were withdrawn from service. No further action needed.

Observations:

- 4.3 The selection of arc flash personal protective equipment (PPE) observed during the assessment is adequate to ensure compliance with NFPA 70E. The use of electrical PPE rated at 40 calories per centimeter for jobs that require much less protection may create other hazards (e.g., poor visibility and heat stress). LBNL should consider expanding the selection of arc flash PPE provided to employees to ensure a balance of protection is provided for electrical and other hazards (e.g., heat stress, slips, trips, and falls).
- 4.4 Housekeeping in the research areas in Building 5 and 16 needs improvement. It was not obvious that electrical equipment and components were maintained or stored in a compliant condition.

5. Feedback and Improvement

Oversight of electrical work is essential to ensure work is performed safely and the continuous improvement is built into our work systems. Five levels of oversight were observed to be in place for electrical work:

- Work reviews and inspection by the organization performing the work.
- Safety inspections by EH&S (Safety Inspector or the Safety Inspector and appropriate subject matter experts)
- Annual Division Self-Assessments
- EH&S Integrated Functional Appraisals (3-year cycle)
- Safety Review Committee Appraisals of the Management of ES&H (MESH Review)

Noteworthy Practices:

- Line management has taken ownership of the electrical safety program through the Electrical Safety Subcommittee. Observation and interviews with Electrical Safety Subcommittee members and their management support indicated that these personnel were committed to improving the program

Findings:

- 5.1 The methods currently used to provide assurance of the effectiveness of the electrical safety program are inadequate. The EH&S Division is assigned responsibility for this assurance program. The integration of electrical safety into existing self-assessment activities is weak.
- 5.2 The annual Lockout/Tagout audit required in OSHA 29 CFR 1910.147(c) (6) is not being performed.

Observations:

- 5.3 Despite having strong and proactive electrical safety work practices, electrical safety events continue to occur. This indicates that some vulnerabilities may not be understood or controlled adequately.
- 5.4 The potential exists to confuse electrical workers, researchers, and support staff with the changes to the electrical safety program that are planned for the near future. Careful coordination of the dissemination of this information and worker involvement will ensure a smooth transition.
- 5.5 The safety inspector requires support from the electrical safety engineer for inspection of complex electrical work. The time available for such inspections is limited. A more robust electrical safety inspection program is essential, especially when the program is being significantly upgraded, which will be the case for the next six months.
- 5.6 The safety inspector does not provide oversight for service vendors, so EH&S oversight for this activity is limited and should be improved.

Appendix 1

Persons Interviewed by Title for This Assessment

6 Electricians

2 Electronics Technicians

1 Lighting crew member

4 Craft Supervisors

1 Safety Inspector

1 Electrical Safety Engineer

2 Senior Managers (88 inch Cyclotron Mgr., D&C Mgr. for Facilities)

3 Electrical Engineers

1 Physics Researcher

2 Safety Coordinators (ALS, AFRD)

1 Building Manager (Building 5 and 16 in ARFD)

1 KOO Contractors Project Manager

2 Pacific Data Electric electrical subcontractor employees

1 Chair of the Electrical Safety Committee

1 Molecular Foundry Project Manager

2 Construction Superintendents (small project)

Appendix 2

Matrix of Observations by Electrical Safety Committee and Electrical Safety Assessment Against the DOE Criteria Provided at the Jefferson Laboratory in February 2005

Appendix 3

Electrical Safety Corrective Action Plan

ID Number	Finding/Observation F=Finding O=Observation	Corrective Action	Priority (H/M/L)	Actionee	Due Date
001	1.1F	1.1-1 Revise General Provisions for Fixed Price Construction to include specific language for LBNL electrical safety requirements	M	J. O'Hearn	6/15/05
002	1.1F	1.1-2 Revise General Provisions for Commercial Suppliers and Services Service to include specific language for LBNL electrical safety requirements	M	J. O'Hearn	6/15/05
003	1.1F	1.1-3 Revise Section 01020 Facilities Master Specifications to include specific language for LBNL electrical safety requirements	M	J O'Hearn	6/15/05
004	1.2F	1.2-1 Revise and Publish Chapter 8 of PUB 3000 to reflect current field practice and to be in compliance with NFPA 70E	H	R. Mueller/T. Caronna	5/15/05
005	1.2F	1.2-2 Conduct a briefing for appropriate staff on the changes to Chapter 8 of PUB 3000.	H	R Mueller/R. DeBusk	5/15/05
006	1.3O	1.3-1 Develop a pre-job safety briefing checklist	M	R. Fisher	6/1/05
007	1.3O	1.3-2 Evaluate the desirability of implementing the pre-job safety briefing checklist developed by training.	M	S. Black	7/1/05
008	2.1F	2.1-1 Proceduralize the Job Analysis of Work Safety process (integrate into existing programs)	M	R. Fisher	6/15/05
009	3.1F	3.1-1 Revise the Pre-Job Safety Checklist for subcontractors to include electrical safety and implement forms control	H	R. DeBusk/S. Black	5/15/05
010	3.2F	3.2-1 Revise the Job Hazards Questionnaire (JHQ) computer program to require first aid training for qualified electrical workers	H	J. Salazar	5/15/05
011	3.3F	3.3-1 Identify those personnel who are qualified electrical workers and who have not completed CPR training. Notify line management. Track this issue through completion when all identified personnel have completed CPR training.	H	J. Salazar/T. Caronna	7/15/05
012	3.4F	3.4-1 Cancel the challenge class for EHS 260	H	J. Salazar	4/1/05
013	3.5F	3.5-1 Develop a plan and schedule for the development and delivery of refresher/retraining for appropriate electrical safety courses.	H	T. Caronna/J. Salazar	6/15/05
014	3.6F	3.6-1 Revise and reissue the Energized Electrical Permit. This item includes training/briefing of workers on new form.	H	R. Mueller/T. Caronna	5/15/05
015	3.7O	3.7-1 Revise existing electrical safety courses to ensure they are current	M	R. DeBusk	7/15/05
016	3.7O	3.7-2 Deliver NPFA 70E training for selected employees and develop a capability through train-the-trainer to deliver this training for the future	H	R. Mueller/R. DeBusk	7/15/05
017	3.8O	3.8-1 Revise the JHQ program for electrical safety to include required courses, as appropriate.	M	T. Caronna/J. Salazar	7/15/05

ID Number	Finding/Observation F=Finding O=Observation	Corrective Action	Priority (H/M/L)	Actionee	Due Date
018	3.9O	3.9-1 Evaluate the revision of the AHD program to include trigger levels for high-hazard electrical work.	M	R. DeBusk/R. Mueller/L. McLouth	7/15/05
019	4.1F	4.1-1 Standardize the methods (barriers and signs) use to control access where electrical work is being performed	H	R. Mueller/R. DeBusk	5/15/05
020	4.2F	4.1-1 This finding was closed during the assessment – no action required	N/A	N/A	N/A
021	4.3O	4.3-1 Evaluate the need to provide greater selection of electrical safety (arc flash) PPE	M	S. Black	6/15/05
022	4.4O	4.4-1 Evaluate and correct housekeeping in Building 5 and 16 as needed	M	H. Rutkowski	5/15/05
023	5.1F	5.1-1 Improve the integration of electrical safety into the LBNL self-assessment process or create new assessment tools for electrical safety	H	J. Chernowski/ R. DeBusk/R. Fisher	6/15/05
024	5.2F	5.2-1 Complete the required annual lockout/tagout audit for LBNL for CY-2004	H	T. Caronna	6/15/05
025	5.3O	5.3-1 Evaluate electrical incidents and near misses for the previous 1-2 years and determine if additional vulnerabilities or corrective actions are needed	M	R. DeBusk/J. Chernowski	7/15/05
026	5.4O	5.4-1 Conduct a survey of electrical and electrical support workers after implementation of electrical safety training in FY-05 to determine the effectiveness of the training and the need for additional actions.	M	R. Mueller/R. DeBusk	11/1/05
027	5.5O	5.5-1 Evaluate the current safety inspector program to ensure that the quantity and quality of electrical safety inspections are adequate – adjust the program as necessary.	H	R. DeBusk/S. Black	7/15/05
028	5.6O	5.6-1 When evaluating the current safety inspector program, evaluate the oversight provided for service vendors; adjust the oversight program as necessary.	H	R. DeBusk/S. Black	7/15/05